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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/820,862 | 04/09/2004 | Guido Schmitz | 245964US0 | 8700 |
| 22850 | 7590 | 06/21/2005 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | TRAN, THAO T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1711 | |
| DATE MAILED: 06/21/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,862

Applicant(s)

SCHMITZ ET AL.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/8/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities: line 2, "is is" should be changed to --is--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6-7, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Semegen et al. (US Pat. 2,827,098).

Semegen teaches a tube in fuel cell, the tube comprising an innermost layer 30 of polyester, a vapor barrier layer 31 of nylon or a linear polyamide (see col. 3, ln. 43-61). Although Semegen is silent with respect to the conductivity of the inner layer, since the reference teaches the inner layer comprising polyester, the invention of Semegen would inherently have the same properties such as conductivity.

4. Claims 1-7, 9-12, 15, 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ries (US Pat. 5,798,048).

Ries teaches a plastic fuel filter having at least three layers, wherein the inner and outer layers are made of a plastic of component A, and embedded between them a layer of a plastic

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component B (see abstract; Fig. 1-2). Component A can be of polyester molding and component B can be of polyamide, polyolefin, or EVOH (see col. 3, ln. 45-49). Polyester used can be polyethylene terephthalate (see col. 5, ln. 49); polyamide can be PA10, PA11 and can have an impact modifier such as EPM or EPDM (see col. 3, ln. 51-55; col. 4, ln. 39-41); polyolefin can be high, intermediate, or low density linear polyethylene and further contains ethylene vinyl alcohol containing up to about 40% weight of ethylene (see col. 4, ln. 61-67; col. 5, ln. 1). The inner and outer layers can further contain additives such as electrically conductive additives (see col. 6, ln. 65-67).

Although Ries is silent with respect to the conductivity of the inner layer, since the reference teaches the inner layer comprising polyester, the invention of Ries would inherently have the same properties such as conductivity.

5. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Boer et al. (US Pat. 6,355,358).

Boer teaches a multilayer composite, comprising layer I of polyamide molding composition and layer II of polyester molding composition; and an adhesion promoter layer in between layers I and II (see abstract). The polyamide molding composition contains PA 10 or PA 11; an impact modifier, such as ethylene propylene or ethylene propylene diene copolymers; and additives, such as plasticizers or electroconductive fillers (see col. 6, ln. 1-8, 39-45, 55-58). The polyester composition includes polyethylene terephthalate, and up to 40% by weight of other thermoplastics, such as impact modifying rubbers and electroconductive fillers (see col. 7, ln. 25-45). The adhesion promoter composition comprises polyamide, polyester, and 40% parts by

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weight of additives such as impact modifying rubber, such as EPM functionalized with 1% maleic anhydride and other additives (see col. 8, ln. 7-25; col. 10, ln. 65-67; col. 12, ln. 4-5).

Although Boer is silent with respect to the conductivity of the inner layer, since the reference teaches the inner layer comprising polyester, the invention of Boer would inherently have the same properties such as conductivity.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Semegen, Ries or Boer as applied to claims 1 and 12 above, and further in view of Kito et al. (US Pat. 6,491,994).

Semegen, Ries, and Boer are as set forth in claims 1 and 12 above and incorporated herein.

None of the references of Semegen, Ries, and Boer teaches a specific plasticizer or its amount as recited in the instant claims.

Kito teaches a polyamide composition, comprising a plasticizer, such as butyl benzenesulfonamide, in an amount of 0-15% (see col. 2, ln. 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the plasticizer, as taught by Kito, in the polyamide

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composition of Semegen, Ries, or Boer, for the purpose of enhancing flexibility of the composition without bleeding of the layer.

8. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Semegen, Ries, or Boer as applied to claim 1 above, and further in view of Oishi et al. (US Pat. 5,849,376).

Semegen, Ries, and Boer are as set forth in claim 1 above and incorporated herein.

None of the references of Semegen, Ries, and Boer teaches a specific amount of ethylene or the amount of acetate being hydrolyzed in ethylene vinyl alcohol as recited in the instant claims.

Oishi teaches a laminate comprising a layer of ethylene vinyl alcohol laminated to a polyester film, the EVOH containing 20-60% mole of ethylene and the degree of hydrolysis is at least 85% (see col. 2, ln. 50-54).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the EVOH as taught by Oishi, in the laminate of Semegen, Ries, or Boer, because Oishi teaches that this EVOH provides optimal combination of melt moldability and gas barrier properties.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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June 16, 2005

Thao Tran

**THAO T. TRAN
PATENT EXAMINER**